

# **LAKE WORTH STORMWATER CHALLENGES**



**Presented by  
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**City of Fort Worth  
Water and Sewer Department  
December 17, 2015**

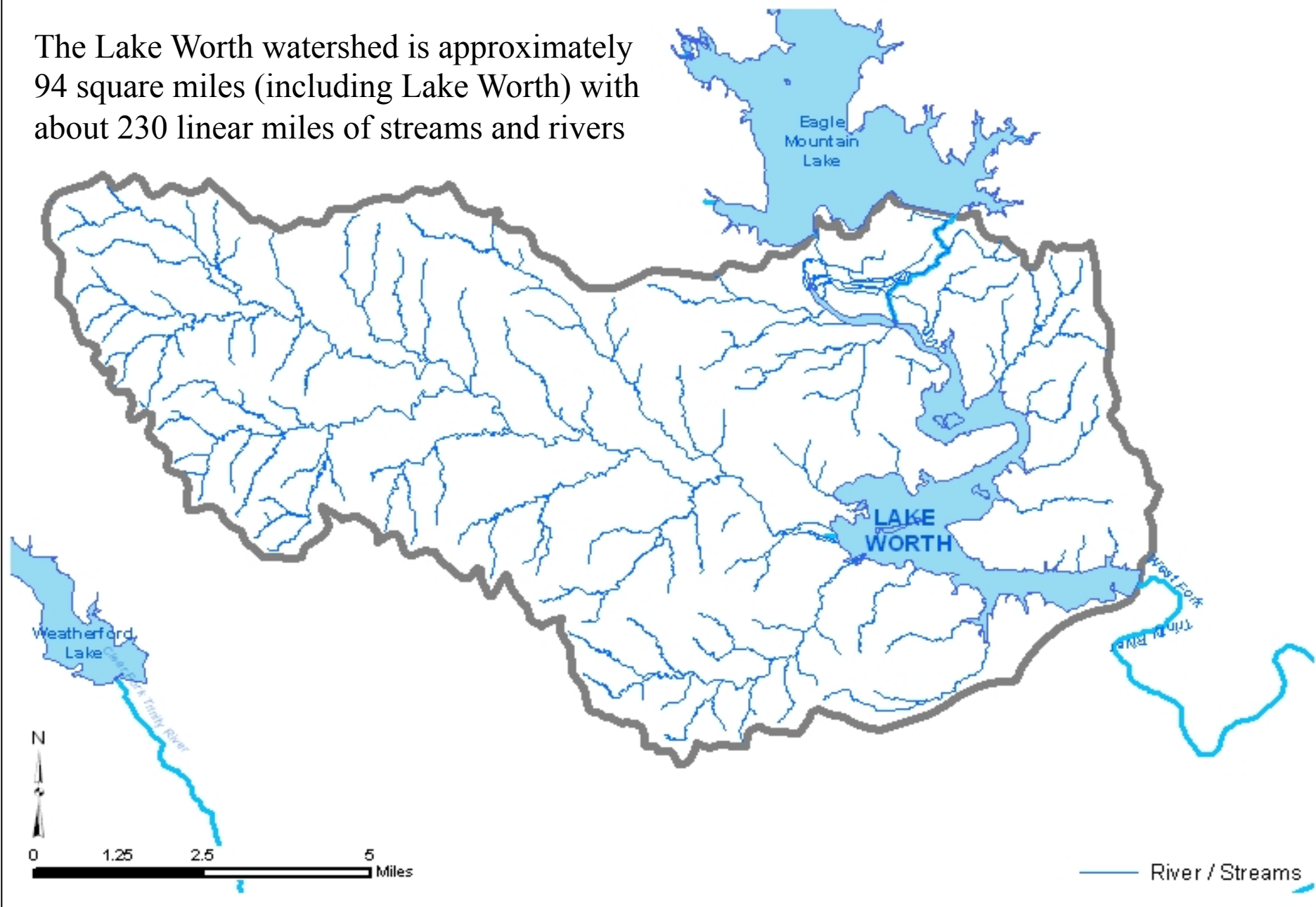
# Outline

- Watershed Management
- Historical Flood Events
- High Water Event Management

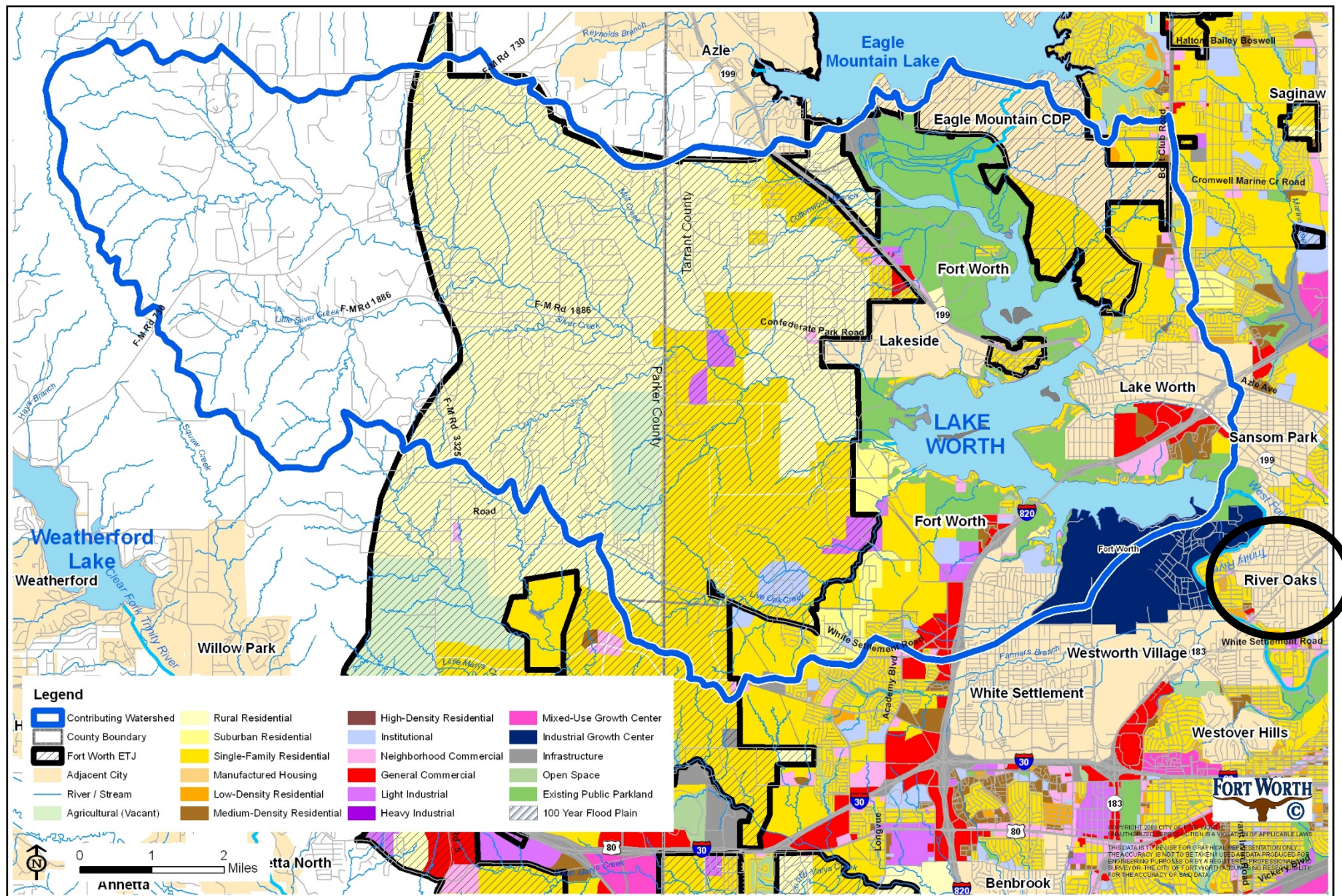
# Comprehensive Watershed Management Plan

- Minimize pollutants at source
  - Conduct Greenprint of Lake Worth watershed
  - Identify high value conservation zones
  - Protect high value zones through conservation easements and development regulations
  - Promote low-impact development
  - Adopt storm water management best practices
  - Promote incentive programs for SWMBP
- Establish and maintain collection points at discharge into Lake Worth
  - Sedimentation basins
  - Catch basins

The Lake Worth watershed is approximately 94 square miles (including Lake Worth) with about 230 linear miles of streams and rivers







# Flood Categories

- Action Stage 594'
- Flood Stage 597'
- Moderate Flood Stage 598'
- Major Flood Stage 599'

# Historic Crests

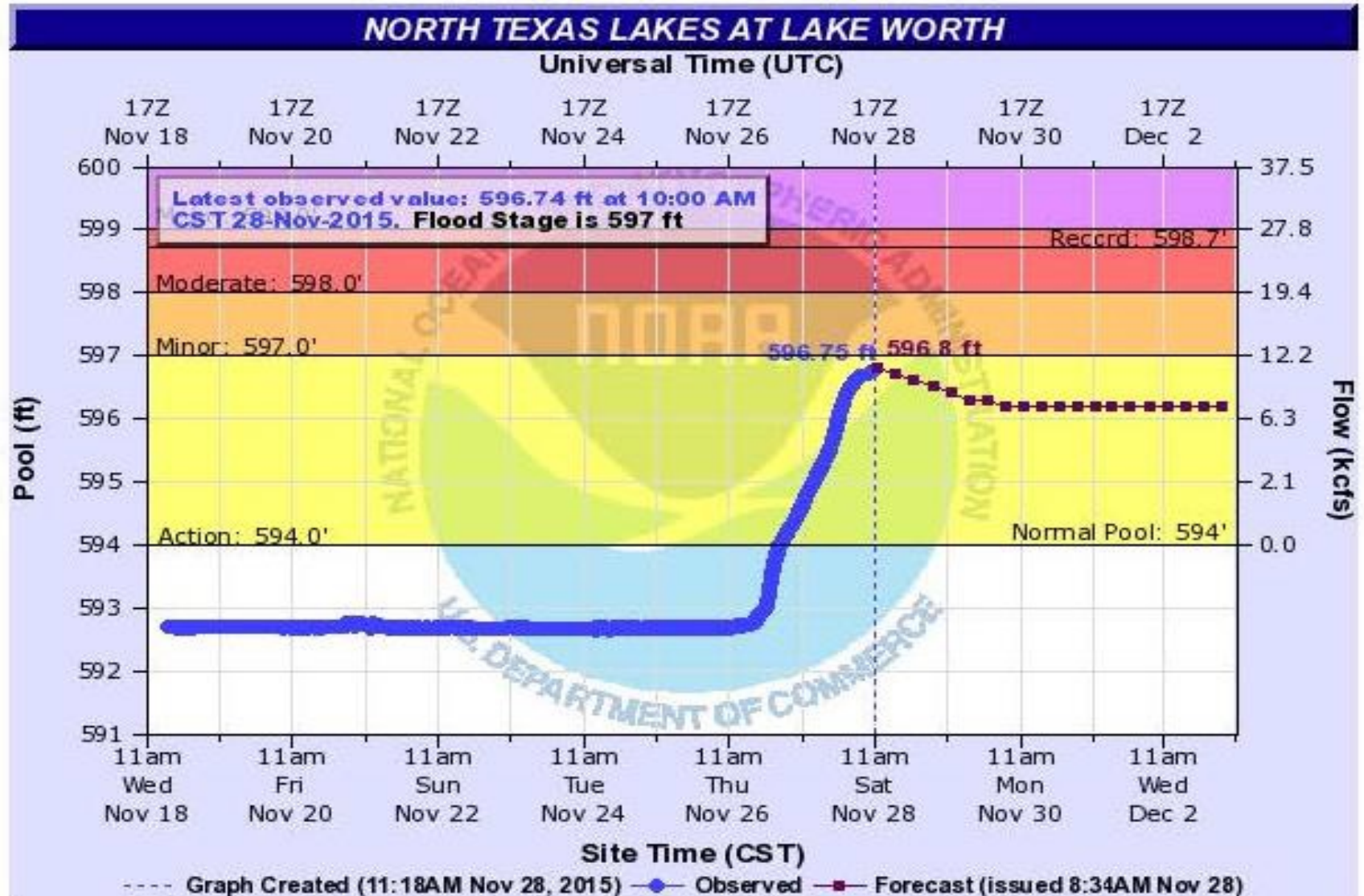
- 598.70 on May 3, 1990
- 598.13 on October 14, 1981
- 597.98 on December 20, 1991

# Recent Crests

- 597.78 on June 10, 2004
- 597.47 on June 20, 2015
- 596.72 on November 28, 2015
- 595.33 on March 1, 2001



National Weather Service  
Advanced Hydrologic Prediction Service  
[water.weather.gov/ahps/](http://water.weather.gov/ahps/)



FLWT2(plotting HPIRG) "Gage 0" Datum: 0'

Observations courtesy of US Geological Survey

Observations courtesy of [US Geological Survey](http://www.usgs.gov/).

# Residential Flooding Elevations

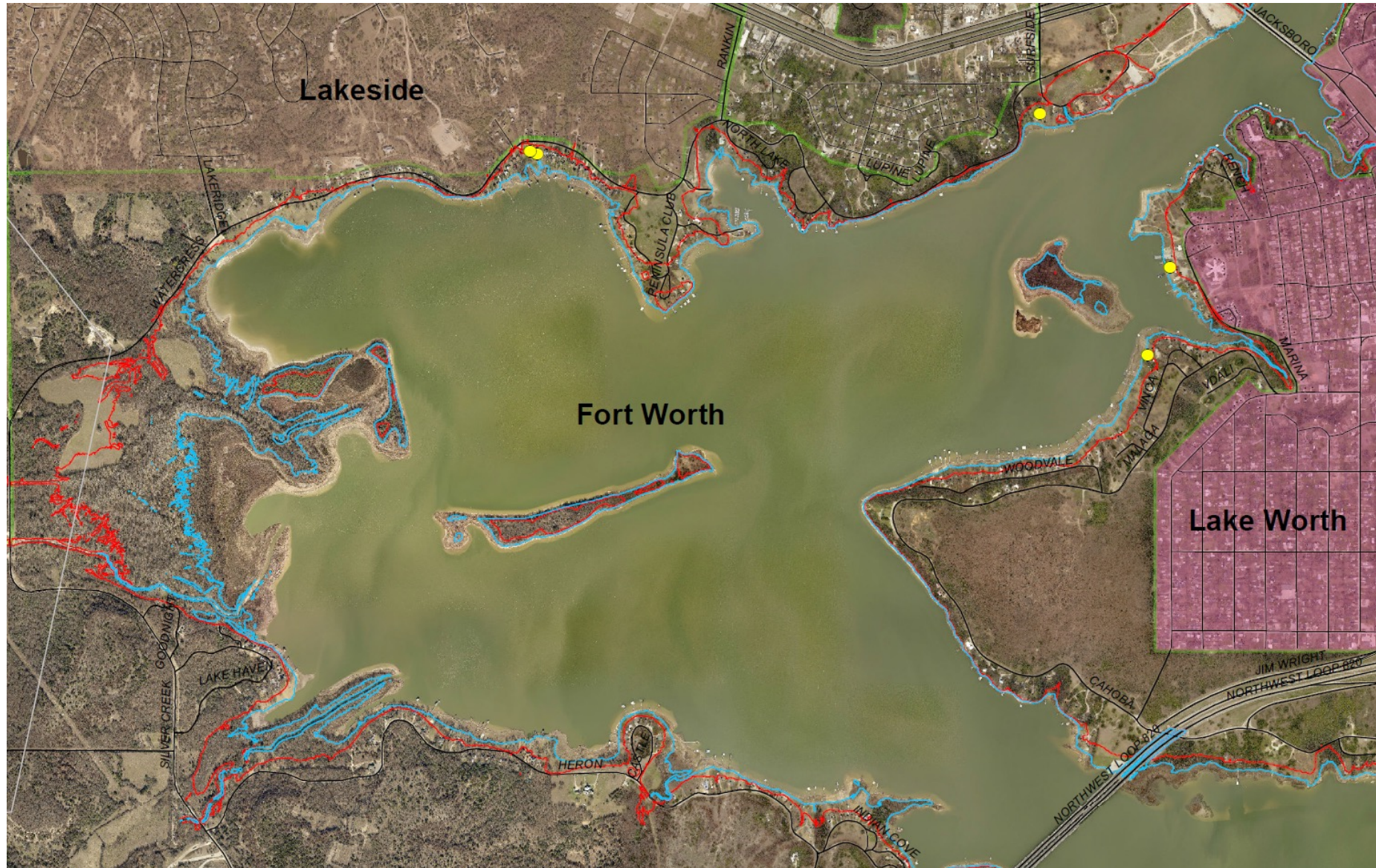
- Flood event defined as one where flood waters exceed the finished floor elevation of a residential structure.
- City acquired a “flood easement” at the time of sale from 594.0 to 600.0 to provide for water storage during high water events.

# High Water Event Management

- Notification of potential flooding of low lying houses begins at 595.0
- Emergency Operation Center notified at 595.0
- Boating activities are banned when elevations reach 595.5
- Flooding of low lying houses begins at 596
- 100 yr. Flood Elevation is 600

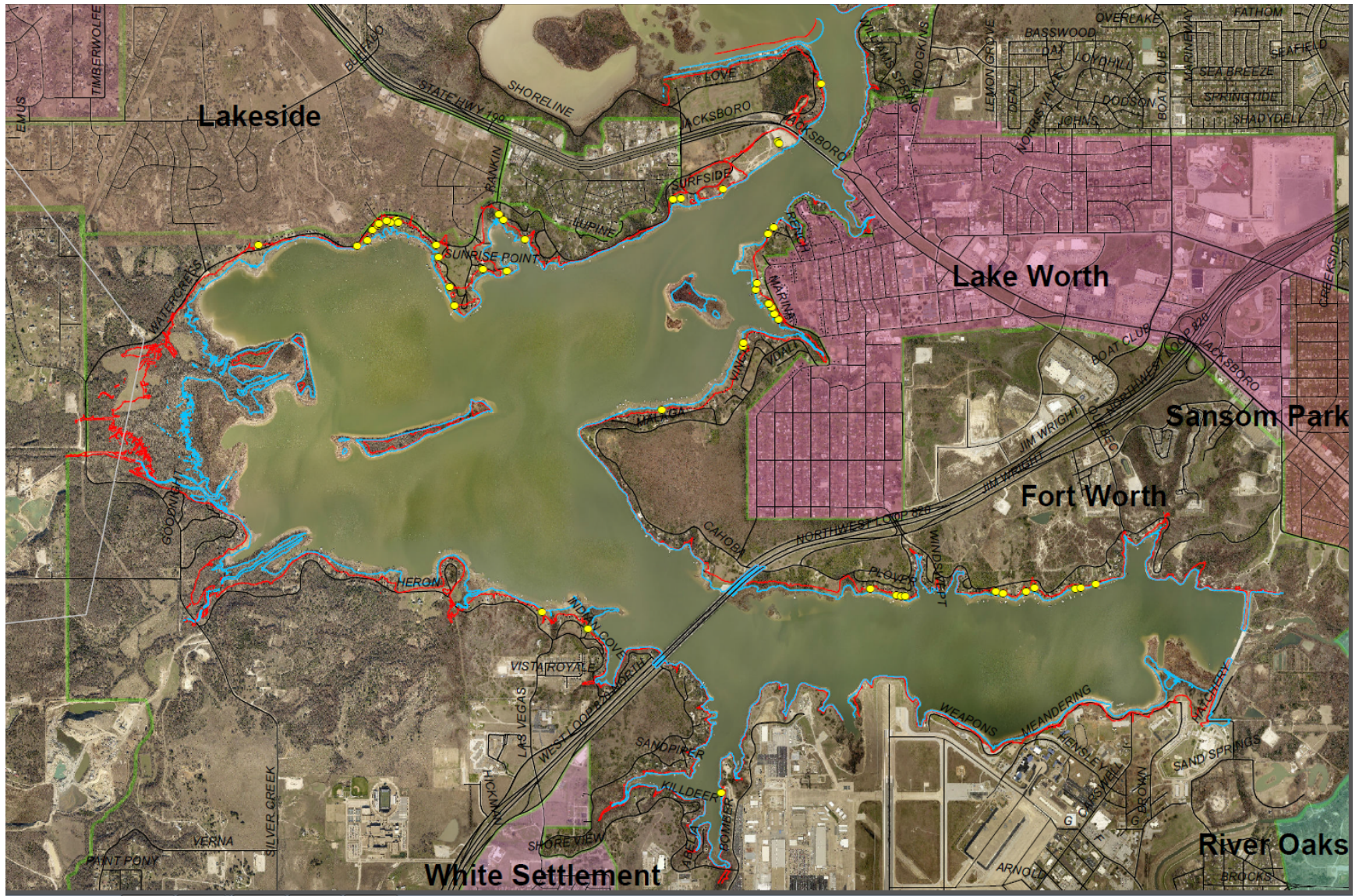


HOUSES BELOW 598  
(5)





# HOUSES BELOW 600 (45)





# Websites

- <http://ww.trwd.com/lake-level-blog>
- <http://water.weather.gov/ahps2/hydrograph.php?wfo=fwd+gage=flw+2>

Questions?